UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,344	08/18/2006	Mi Kyoung Park	YPLE.0015	4597

38327 7590 09/05/2008

REED SMITH LLP
3110 FAIRVIEW PARK DRIVE, SUITE 1400
FALLS CHURCH, VA 22042

EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
09/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,344	PARK ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06/16/2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *17-21* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/04/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities: Last lines of claim 15, the word "sesrver" should be changed to "server". Appropriate correction is required.

Election/Restrictions

2. Applicant's election without traverse of Specie I (claims 1-16) in the reply filed on 06/16/2008 is acknowledged.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-61 of copending Application No. 2007/0109124A1 (Park et al) in view of Perttila et al (US 7,274,909).

Regarding claim 1, Park teaches a mobile communication terminal that receives information received from a contactless communication tag (see claims 1 and 16), the mobile communication terminal comprising: a first communication unit (see claims 1 and 16), which wirelessly exchanges data with the contactless communication tag and wirelessly sends a power required for the contactless communication tag (see claims 1 and 16), a storing unit in which at least one encryption key related information are stored (see claims 1-4, 7, 16 and 25-29), a decryption unit (see claims 1-4, 7, 16 and 25-29), which decrypts data received from the contactless communication tag based on encryption key related information that is selected from the encryption key related information by encryption key specifying information received from the contactless communication tag (see claims 1-4, 7, 16 and 25-29), an information reading unit (see claims 1-4 and 7-16), which requests product information to the contactless communication tag attached to a product and reads the product information received from the contactless communication tag (see claims 1, 5, 6, 8, 9 and 16), and an output unit (see claims 1, 5, 6, 8, 9 and 16), which outputs the read product information (see claims 1-61).

Park does not specifically disclose a second communication unit, which transmits data to and receives data from a service management server via a wireless communication network.

Perttila teaches a second communication unit (see Abstract and column 16, lines 45-50), which transmits data to and receives data from a service management server via a wireless communication network (see Abstract and column 16, lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Perttila into the system of Park in order to A method and system locate a transponder that has an associated identifier and content data, at a location substantially accessible to a user of the mobile terminal (see Perttila, Abstract).

Regarding claim 2, Park teaches the encryption key related information includes at least one encryption key and the decryption unit decrypts product information received from the contactless communication tag by an encryption key selected based on the encryption key specifying information received from the contactless communication tag (see claims 1-4, 7, 16 and 25-29).

Regarding claim 3, Park teaches comprising a leaked encryption key updating unit that upon receipt of encryption key update request information concerning a leaked encryption key from the contactless communication tag, discards an encryption key designated by the encryption key update request information from the storing unit and updates with a newly assigned encryption key (see claims 1-4, 7, 16 and 25-29).

Regarding claims 4, 7 and 12, Park teaches the encryption key related information includes a plurality of encryption keys that is classified and assigned according to a classification reference including at least one of a type of industry, a manufacturer, a brand, and a product name (see claims 1-4, 7, 16 and 25-29), and the decryption unit

decrypts the product information received from the contactless communication tag using an encryption key selected from the plurality of encryption keys based on the encryption key specifying information received from the contactless communication tag (see claims 1-4, 7, 16 and 25-29).

Regarding claim 5, Park teaches the encryption key related information includes at least one seed value for creation of different encryption keys (see claims 1-4, 7, 16 and 25-29), and the decryption unit decrypts the product information received from the contactless communication tag using an encryption key using a seed value selected based on the encryption key specifying information received from the contactless communication tag (see claims 1-4, 7, 16 and 25-29).

Regarding claim 6, Park teaches comprising a leaked seed value updating unit that, upon receipt of seed value update request information concerning a leaked seed value from the contactless communication tag, removes a seed value designated by the seed value update request information from the storing unit and updates with a newly assigned seed value (see claims 3, 7-10, 20, 29, 32 and 34).

Regarding claim 8, Park teaches comprising a leaked encryption key updating unit that, upon receipt of update request information concerning leaked encryption key related information from the contactless communication tag, removes encryption key related information designated by the update request information from the storing unit and updates with newly assigned encryption related information (see claims 1-4, 7, 16 and 25-29).

Regarding claim 9, Park teaches comprising a replay attack blocking unit which

generates a one-time use random number, adds the one-time use random number to information to be transmitted to the tag reader (see claims 1-5), provides the information to the decryption unit, and checks if a random number extracted from information received from the tag reader is the same as the one-time use random number, thereby blocking replay attack (see claims 12, 22, 35 and 53).

Regarding claim 10, Park teaches the storing unit includes non-volatile memory, and further comprising a refresh processing unit that reads the product information from the storing unit and re-records the read product information on the storing unit see claims 1-4).

Regarding claim 11, Park teaches a radio frequency (RF) circuit, the information reading unit (see claims 1-5), the decryption unit (see claims 1-4, 7, 16 and 25-29), and the storing unit of the wireless communication unit are implemented as application specific integrated circuit (ASIC) (see claim 37).

Regarding claim 13, Park teaches comprising a reader authentication unit that authenticates an external mobile communication terminal having a tag read function by communicating with the external mobile communication terminal having the tag read function and outputs a result of authentication concerning the external mobile communication terminal having the tag read function to the output unit (see claim 39).

Regarding claim 14, Park teaches comprising an encryption unit that encrypts data to be transmitted to the contactless communication tag based on encryption key related information selected from the encryption key related information by encryption key specifying information received from the contactless communication tag (see claims

1-4, 7, 16 and 25-29).

Regarding claim 15, Park teaches the information transmitting unit adds purchasing information of a product to a result of determination if a purchasing confirm command is input through an information input means included in the mobile communication terminal and transmits the result of determination to the service management server (see claims 12, 22, 35 and 53).

Regarding claim 16, Park teaches a result of determination is stored in the storing unit every time the product information is read (see claims 1-4), and the information transmitting unit transmits the result of determination stored in the storing unit to the service management server if an information transmission command is input through an information input means included in the mobile communication means (see claims 1-4).

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 4, 5, 7 and 10-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamberg (US 7,340,214).

Regarding claim 1, Hamberg teaches a mobile communication terminal that receives information received from a contactless communication tag (see Abstract and column 3, line 50 to column 4, line 34), the mobile communication terminal comprising: a first communication unit, which wirelessly exchanges data with the contactless communication tag and wirelessly sends a power required for the contactless communication tag (see Abstract and column 3, line 50 to column 4, line 34), a second communication unit, which transmits data to and receives data from a service management server via a wireless communication network (see column 2, lines 33-67, column 4, lines 35-58, column 6, lines 7-18 and column 7, lines 4-27), a storing unit in which at least one encryption key related information are stored (see column 13, lines 52-64, column 19, lines 5-47 and column 20, lines 3-53), a decryption unit (see Abstract, column 5, lines 18-30, column 13, line 65 to column 14, line 28 and column 20, lines 3-53), which decrypts data received from the contactless communication tag based on encryption key related information that is selected from the encryption key related information by encryption key specifying information received from the contactless communication tag unit (see column 13, lines 52-64, column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53), an information reading unit (see column 5, lines 18-30), which requests product information to the contactless communication tag attached to a product and reads the product information received from the contactless communication tag, and an output unit, which outputs the

read product information (see column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claim 2, Hamberg teaches the encryption key related information includes at least one encryption key and the decryption unit decrypts product information received from the contactless communication tag by an encryption key selected based on the encryption key specifying information received from the contactless communication tag (see column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claims 4, 7 and 12, Hamberg teaches the encryption key related information includes a plurality of encryption keys that is classified and assigned according to a classification reference including at least one of a type of industry, a manufacturer, a brand, and a product name, and the decryption unit decrypts the product information received from the contactless communication tag using an encryption key selected from the plurality of encryption keys based on the encryption key specifying information received from the contactless communication tag (see column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claim 5, Hamberg teaches the encryption key related information includes at least one seed value for creation of different encryption keys, and the decryption unit decrypts the product information received from the contactless communication tag using an encryption key using a seed value selected based on the encryption key specifying information received from the contactless communication tag

(see column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claim 10, Hamberg teaches the storing unit includes non-volatile memory, and further comprising a refresh processing unit that reads the product information from the storing unit and re-records the read product information on the storing unit (see column 13, lines 52-64, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claim 11, Hamberg teaches a radio frequency (RF) circuit, the information reading unit, the decryption unit, and the storing unit of the wireless communication unit are implemented as application specific integrated circuit (ASIC) (see column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claim 13, Hamberg teaches comprising a reader authentication unit that authenticates an external mobile communication terminal having a tag read function by communicating with the external mobile communication terminal having the tag read function and outputs a result of authentication concerning the external mobile communication terminal having the tag read function to the output unit (see Abstract, column 13, lines 44-46 and column 14, lines 29-43).

Regarding claim 14, Hamberg teaches comprising an encryption unit that encrypts data to be transmitted to the contactless communication tag based on encryption key related information selected from the encryption key related information by encryption key specifying information received from the contactless communication tag (see

column 13, line 65 to column 14, line 28, column 19, lines 5-47 and column 20, lines 3-53).

Regarding claim 15, Hamberg teaches the information transmitting unit adds purchasing information of a product to a result of determination if a purchasing confirm command is input through an information input means included in the mobile communication terminal and transmits the result of determination to the service management server (see Abstract and column 3, line 50 to column 4, line 34).

Regarding claim 16, Hamberg teaches a result of determination is stored in the storing unit every time the product information is read, and the information transmitting unit transmits the result of determination stored in the storing unit to the service management server if an information transmission command is input through an information input means included in the mobile communication means (see column 13, lines 52-64, column 19, lines 5-47 and column 20, lines 3-53).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571)272-7911. The examiner can normally be reached on 9:30am-8:00pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

/Nghi H. Ly/
Primary Examiner, Art Unit 2617